



## Aerators... Start Your Engines!

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Nobody likes aeration, especially core aeration, so why do it? Albeit a major hassle, core aeration continues to be a foundational cultural program for great putting greens. Sure, excellent sand topdressing programs, minimally disruptive venting techniques throughout the growing season, solid-tine aeration, deep verticutting and other aeration methods like sand and water injection can reduce the frequency by which core aeration needs to be performed, but there is still no stand-alone substitute for this time-tested cultural practice. Core aeration continues to be a key ingredient in producing great putting surfaces.



*Although nobody likes the hassle or disruption of core aeration, it continues to be a requisite cultural practice in producing great putting surfaces.*

So, given that you're going to core aerate, make sure to do it right. Below is a top-10 list of tips (from the excellent article [Easing the Pain of Core Aeration: Ten Steps to Quicker Recovery](#)) that will help conventional core aeration – i.e., hollow tines of ½-inch diameter or larger – go as smoothly as possible with the fastest recovery and minimal disruption to play.

1. **Proper timing** - Arguably the single greatest factor affecting the success and time necessary for recovery, core aeration needs to be done when the turf is healthy and actively growing so greens will heal and recover as quickly as possible. Aeration also needs to be performed when the

desirable turf has a competitive advantage over weeds. If performed at the wrong time of year, voids created in the turf canopy may instead be populated by undesirable turfgrasses or other weeds.

2. **Fertilize three to five days prior to aeration** – Stimulating turf growth a few days prior to aeration helps holes heal more rapidly once aeration is complete. Soluble nitrogen sources – e.g., urea, ammonium sulfate, calcium nitrate or potassium nitrate – work best at rates of approximately ¼ to ½ pound nitrogen per 1,000 square feet.
3. **Irrigate to provide adequate soil moisture** – Proper soil moisture is needed because it serves as a lubricant for coring tines and helps resist soil heaving and tearing of the turf. Excessive soil moisture should be avoided, but if greens are dry then irrigate a day or two prior to aeration for best results.
4. **Make a clean aeration hole** – Messy holes are slow to recover, so it is essential to make clean aeration holes that can heal rapidly. Proper equipment setup and an inventory of several new sets of hollow tines are necessary for making clean holes.
5. **Topdress with dry sand on a clean, dry surface** – To get the most out of core aeration, open holes need to be completely backfilled with sand. To do so, the surface should be cleared of debris following aeration and dry topdressing sand applied. Dry sand is preferred over moist sand because it can be more easily incorporated into holes without excessive dragging or brushing. *(NOTE: So that open holes can be completely filled with sand, coring tines should be ½-inch diameter or larger.)*
6. **Completely fill aeration holes to the surface** – To restore surface smoothness as soon as possible, open holes should be filled to the top with sand. Oftentimes, a second topdressing application is required several days later to top off holes with more sand to account for sand settling within aeration holes, which is generally most noticeable following rain or irrigation. *(NOTE: Again, coring tines should be ½-inch diameter or larger. Attempts to completely fill smaller holes with sand are largely unsuccessful because of sand “bridging” in the hole.)*

7. **Avoid excessive turf abrasion when incorporating sand into aeration holes** – Excessive dragging and/or brushing can cause damage and abrasion to the turf and extend recovery time, so do so only to the point where sand fills the holes and turf leaves are visible. Again, use dry sand, if possible.
8. **Roll greens to smooth the surface** – Rolling greens after aeration and topdressing helps eliminate surface irregularities, provide reasonable putting quality and improves mowing quality.
9. **Let turf grow through the sand topdressing layer** – To avoid damaging mowers and picking up most of the sand that was just applied, roll the greens for a day or two following aeration and topdressing to allow the turf an opportunity to grow through the sand. Slightly raising the height of cut on mowers when mowing does resume is beneficial as well.
10. **Irrigate and fertilize to stimulate turf recovery** – Frequent irrigation and hand watering throughout the day for several days is typical to stimulate turf growth and prevent the greens, especially the sand-filled aeration holes themselves, from becoming drought stressed. Five to seven days later, a follow-up application of a soluble nitrogen source at a rate of approximately ¼ to ½ pound nitrogen per 1,000 square feet will help restore complete turf coverage.

Source: Ty A. McClellan

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